Flight-Testing Newton's Laws			
2006 Science and Technology/Engineering			
Curriculum Frameworks			
Massachusetts Science and Technology/Engineering			
Grades 9-12			
Activity/Lesson	**State**	**Standards**	
Session-1 (1-17)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-1 (1-17)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-2 (1-10)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-3 (1-6)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-3 (1-6)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-4 (1-11)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-5 (1-6)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-5 (1-6)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-6 (1-8)	MA	SCI.9-12.P.I.1.A.1.3	Create and interpret graphs of 1-dimensional motion, such as position vs. time, distance vs. time, speed vs. time, velocity vs. time, and acceleration vs. time where acceleration is constant.
Session-6 (1-8)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-6 (1-8)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-7 (1-5)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton's three laws of motion.
Session-7 (1-5)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.

Session-8 (1-9)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton’s three laws of motion.
Session-8 (1-9)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.
Session-9 (1-7)	MA	SCI.9-12.P.I.1.A.1.4	Interpret and apply Newton’s three laws of motion.
Session-9 (1-7)	MA	SCI.9-12.P.I.2.A.2.5	Interpret and provide examples that linear momentum is the product of mass and velocity and is always conserved (law of conservation of momentum). Calculate the momentum of an object.